

Original/Duplicate/Triplicate

SBR No. 02/22-23
 No. 1st & Final bill
 Division: Electrical (Yalahanka)
 Bill Received No. Dated 30-4-22

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR No. 02/22-23
 Date 2010 Dt. 30-4-22

Sub-Division: Electricals

Head of Account : P-CODE:P0300
 Job Code :-002-21-000042

Schedule Docket No.

Head of Account : P-CODE:P0300

D.R.No. :

Name of Work:- Providing illumination in Nanjappa Circle, Doddabhommasandra circle, ananthpura Gate, Nagenahalli Gate, Kenchenahalli Gate, Vishal Mart 4Th Phase Yalahanka Traffic police limit Ward No 02 & 10.

Name of Contractor and Full Address: M/s Shree Vinayaka Electricals

Reference to Agreement No:EE(ele)/YZ/W.O/000002/2021-22

Date 17/11/2021

Certified that the measurements were taken by me on 11/2/2022 and recorded of Pages 257407 to 7414 of measurement Book No. 257521-22 and that the work is satisfactorily executed.

For SHREE VINAYAKA ELECTRICALS

Contractor

Certified that the measurement were taken by me on 11/2/22 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

II Memorandum of Payment

- Total value of work done or supplies made as per account within
- Deduct amount to be held in reserve being percent Rs.....
- Balance
- Deduct Payment:
 - Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... Amount adjusted towards cash advance recovery of
 - Payments } cost store or other material supplied.
Now made } recovery of amount creditable to this/other work
Amount paid on this bill Cheque / Cash.
- Balance being unpaid value of work done held in reserve.
- Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.
- Net amount due to or from Contractor
- Advance to Contractor for materials brought to site (as detailed) within.
- Value of Government materials supplied.

Total amount adjusted

Sub-Division Officer

BBMP, Bangalore

Bill- 1150191.00

IT 1% 11502.00

LWC 1% 11502.00

CBF 0.1% 1151.00

Sest 1% 11502.00 10453.00

CGST 1% 11502.00 10453.00

Deductions: 47159.00 115061.00

Cheque: 1103.032.00

1105130.00

FOR SHREE VINAYAKA ELECTRICALS

Contractor's Signature

Received Rs. (in words)

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands)

(For use in the Office)

Witness

1.

2.

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....

Initials of Officer making payment

For SHREE VINAYAKA ELECTRICALS

Stamp

V. J. J. J.

P0300 M & R to Electrical

11.50.191.00

1103.032.00 1105130.00

47159.00 115061.00

Executive Engineer

Sup

V. J. J. J.

Sl. No	Description	Unit
	Name Of Work:- Providing illumination in Nanjappa Circle,Doddabhommasandra circle, ananthpura Gate,Nagenahalli Gate,Kenchenahalli Gate,Vishal Mart 4Th Phase Yalahanka Traaffice police limit Ward No 02 & 10.	
1	Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7.Erection of heavy duty pole on Footpath / median 9Mt (5Mt Hb, 165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht, 114.3mm dia 3.65mm thick) as per IS 410 SP 32	Nos
2	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 Mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories.Single bracket 1.5 Mtr. Length	
3	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 Mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories.Double bracket 2x1.5 Mtr. Length	Each
4	Supply of LED floodlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output, Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm.Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years,against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Floodlight 200W	
5	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 120 Watts	Nos
6	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each
7	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 5) 3.5 core 25 sqmm	Mtr

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		20	11300.00	226000.00	20	226000.00	
		8	700.00	5600.00	8	5600.00	
		4	1300.00	5200.00	4	5200.00	
		24.00	13000.00	312000.00	24	312000.00	
		16	8300.00	132800.00	16	132800.00	
		40	100.00	4000.00	40	4000.00	
		147	100.00	14700.00	147	14700.00	

8	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. 7) 25 sqmm to 75 sqmm	Rmt
9	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) 2) In soil (ordinary)	Mtrs
10	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 2) 50x50x6mm	Per Mtr
11	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE, 1) 100Amps 25kA.	Each
12	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 4) 100Amps	Per Mtr
13	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 1) 14SWG	Mtr
14	Supplying and fixing hylum plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F. screws.	Sqcm
15	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.10. sqmm	Mtrs
16	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No
17	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip	Mtrs
18	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.40mm	Mtrs
19	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.25Sqmm	Nos
20	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.10. sqmm	Mtrs
21	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring. 4 sqmm	Mtrs
22	Hiring of 35 tons capacity Crane for releasing and refixing of High Mast	Hrs
23	Supply of 12 MM Gi Steel wire rope 0.547Kgs/Meter	Mtrs
24	Providing RCC Foundation for 12 Mtrs Mini high mast Datarate As per The Drawing and Civil estimate enclosed	Nos
25	Hiring of tipper	Hrs
26	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components	Nos

		147	30.00	4410.00	147	4410.00	
		95	60.00	5700.00	95	5700.00	
		28	250.00	7000.00	28	7000.00	
		3	4000.00	12000.00	3	12000.00	
		4	300.00	1200.00	4	1200.00	
		105000	0.40	42000.00	105000	42000.00	
		30000	0.20	6000.00	30000	6000.00	
		30	100.00	3000.00	30	3000.00	
		3	2000.00	6000.00	3	6000.00	
		9	70.00	630.00	9	630.00	
		8	300.00	2400.00	8	2400.00	
		0	300.00	0.00	0	0.00	
		30	100.00	3000.00	30	3000.00	
		397	9.00	3573.00	397	3573.00	
		50	500.00	25000.00	50	25000.00	
		62	33.90	2101.80	62	2101.80	
		2	25000.00	50000.00	2	50000.00	
		25	150.00	3750.00	25	3750.00	
		3	32000.00	96000.00	3	96000.00	

27	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A.2 X 25 + 1 X 25 SQ.MM	Per Mtr
28	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation of size (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x25) for street light control.	Mtrs
29	LT 2 Pin X Arms - MS (Dwg No. BESCO/GM/QS&S/32 Dtd 24.11.2018)	Nos
30	RCC Pole clamp - MS (Dwg No. BESCO/GM/QS&S/30 Dtd 24.11.2018)	Nos
31	Supplying of Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	Nos
32	Supplying of Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook)	Nos
33	Installation of Insulation piercing connector for main to street light Main : 16-95sqmm, Tap : 1.5-10sqmm(EP95)	Nos
34	Fixing of Universal/ Dead end Hook	Nos
35	Supply of Suspension Clamp Assembly 16 to 70 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook) 284845 No	Nos
36	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger	
	Total Rs	
	Add GST 12% <i>11025 \$km</i>	
	Total Rs	

Certificate: 1. Certified that the Above Work has been carried out satisfactorily

T.N. Reddy
7/11/18

[Signature]
Assistant Executive Engineer (Ele)
BBMP, Bangalore

		496	100.00	49600.00	496	49600.00	
		496	22.00	10912.00	496	10912.00	
		18	60.00	1080.00	18	1080.00	
		18	40.00	720.00	18	720.00	
		35	100.00	3500.00	35	3500.00	
		4	100.00	400.00	4	400.00	
		35	30.00	1050.00	35	1050.00	
		4	100.00	400.00	4	400.00	
		18	100.00	1800.00	18	1800.00	
		18	100.00	1800.00	18	1800.00	
				1045326.80		1045326.80	
				104863.78		104863.78	
	873864.80			1150190.58		1150190.58	